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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/557,644	04/25/2000	Jin K. Song	ASTRI.0101	9251

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EXAMINER

WALSH, DANIEL I

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 01/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/557,644

Applicant(s)

SONG, JIN K.

Examiner

Daniel I Walsh

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Receipt is acknowledged of the amendment received on 9 December 2002. Claims 12-17 are currently pending.

Additional Remarks

2. The indicated allowability of claims 12-17 and the Final Rejection (see Paper No. 7) is withdrawn in view of the newly discovered prior art to Walter et al. The delay in citation of this art is regretted. Rejections based on the newly discovered prior art follow.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 12, 13, 16, and 17 are is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith, III (US 5,466,158), in view of Walter et al. (US 6,313,474).

Smith, III teaches an interactive book device with a book 80 with illustrations and text (FIG. 1 and FIG. 2), a book holder adapted to accept the book, the holder having a reading surface 30 (FIG. 1 and FIG. 2) with a cartridge slot 54, a speaker 22, and power supply 46. Smith, III also teaches a cartridge to be inserted into the cartridge slot, the cartridge including

stored audio related to the illustrations or text on the pages of the book though game cartridge 50 that "allows about 175 spoken words and 25 special sound effects" (col 5, lines 48+).

Smith, III fails to teach the downloading/storing of a duplicate of the electronic equivalent representations.

Walter et al. teaches a method for electronically storing text content for use in an electronic book reader system, the method comprising the steps of creating electronic equivalent representations of the text content and storing the electronic equivalent representations in a first electronic memory space (cartridge 215), and downloading a duplicate of the electronic equivalent representations stored in the first electronic memory space into a second electronic memory space housed within the electronic book reader system (flash memory 342), the downloaded duplicate of the electronic equivalent representations stored in the second electronic memory space according go pages of the electronic reader system through "The method of claim 3 wherein transferring information transfers content of the cartridge storage to the on-board storage when the identified transfer mode is the restore mode" (col 7, claim 5). Here it is understood that the information is stored according to the pages, as is well known and understood for books. Though Walter et al. is silent to the storage and transfer of audio data, it is well known and obvious that cartridges can contain audio data, as taught by Smith, III as taught above.

Re claim 13, Smith, III teaches recording sounds/words corresponding to text/illustrations, as discussed above (abstract).

Re claim 16, Smith, III teaches packing the electronic representations stored in the memory space using a chip within the cartridge through "The most economical and efficient

choice appears to be to place a dedicated microprocessor containing a built-in program and sound generating capabilities in the game cartridge 50. The preferred embodiment uses a Texas Instrument 50 C19 speech processor/microprocessor, an eight-bit microprocessor with special built-in sound-generating circuitry. The chip contains a 32,000 byte mask ROM for program and sound storage. This allows about 175 spoken words and 25 special sound effects for each cartridge: sufficient capacity for several comic books" (col 5, lines 42+). It is understood that the packaging would occur after the storing of data, for ease of production and manufacturing.

Re claim 17, it is understood that the cartridge is inserted into the book reader system as seen in FIG. 1 (Smith, III) and FIG. 3 (Walter et al.).

Therefore at the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Walter et al. with those of Smith, III.

One would have been motivated to do this to have an electronic book system that could restore both audio and visual/text data corresponding to an electronic book, for added convenience to the user.

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith, III as applied to Walter et al., as applied to claim 12 above, and further in view of Eberhard et al. (US 6,331,867).

The teachings of Smith, III and Walter et al. have been discussed above.

Smith, III and Walter et al. fail to specifically teach or fairly suggest that electronic audio and text is in a digital format.

Eberhard et al. an electronic book which outputs digital audio signals through "The device 30 also includes an audio speaker 44 (FIG. 5) for outputting digital audio signals, and

includes an infrared (IrDA) transceiver 46 (FIG. 5) for communicating with kiosks, PC's, other infrared devices, or another hand-held device" (col 4, lines 3+). Therefore, Eberhard et al. teaches digitally formatted data for an electronic book. Further, digital formats are well known and conventional for clarity and crispness of sound, and obvious to an artisan of ordinary skill in the art.

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Eberhard with those of Smith, III., and Walter et al.

One would have been motivated to do this in order to have a higher quality of sound for the enjoyment of the user, in a well-known and obvious digital data format that is reliable and predictable, and therefore conventional in the art.

Though Eberhard et al. teaches that the text is digital, it would have been obvious to have the audio content digital as well, since both are in fact components of the book being read, and therefore digitally formatting the data would result in quicker data access/storage, and is a well known and convention method of formatting data that produces reliable and predictable results, and has an accepted status in the art.

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith, III as modified by Walter et al., as applied to claim 12 above, and further in view of Tan (US 5,897,324).

The teachings of Smith, III and Walter et al. have been discussed above.

Smith, III and Walter et al. fail to specifically teach the use of memory with addresses where the equivalent representations are sorted and stored.

Tan teaches "In one of the preferred embodiment, the universal interfacing adapter 100

can be standardized as a cartridge to receive different multimedia books 110. Each time a multimedia book 110 is inserted into the adapter 100, a book number is transmitted to the storage and process means 115. The storage and process means 115 verifies that the book number is valid and a special section of the memory space is allocated for the inserted multimedia book 110. As the user turns to a page, a page number is transmitted via the interfacing adapter 100 and the page number is used as an address to point specific segments of memory in the storage and process means 115 and ready to respond to different kinds user input, e.g., pushed buttons, audio messages, etc. Depending on the combination of book numbers and page numbers, the storage and process means 115 may also execute different set of commands or instructions to perform different types of processing or output activities corresponding to different user input" (col 4, lines 42+). Further, at the time the invention was made, it was well known to store memory in unique addresses (such as on computers and other electrical devices) as a way to organize and effectively retrieve and sort data. Therefore, using memory addresses for the data storage of claim 15, would have been an obvious expedient, and therefore it would have been obvious to combine the teachings of Smith, III and Walter et al. with those of Tan in order to use a well known and conventional method of memory addressing and organization, consistent with producing proven/reliable results.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Daniel Walsh** whose telephone number is (703) 305-1001. The

examiner can normally be reached between the hours of 7:30am to 4:00pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone numbers for this Group is (703) 308-7722, (703) 308-7724, or (703) 308-7382.


Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to **[daniel.walsh@uspto.gov]**.

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



DW
1/8/03



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